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**DIRECTIONS FOR THE TANNING AND DRESSING
OF FURS**

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Contribution from the Museum of Vertebrate Zoology, University of California

The following directions for dressing small skins of fur-bearing mammals is based on the personal experience of the writer during the past twelve years, both at home and in the museum. Skins in the California Museum of Vertebrate Zoology tanned by him in 1909 are still (in 1921) in good condition. There has been no appreciable change of color of the fur or weakening of the fiber of the skin in this time, although the work was done by an amateur. Other beginners using the same methods have secured satisfactory results.

Thick or greasy skins, such as those of the bear and coon, should be shaved down with a tanner's knife and de-greased by soaking overnight in gasoline before the tan liquor is applied. This involves considerable experience and skill in the use of the knife; therefore such skins should be avoided, at least in the beginning. Wildcat skins are perhaps best to begin on, and then skins of the gray fox and coyote may be tried.

In warm weather, prompt skinning is necessary to prevent the hair from coming out. Skins that are to be dressed at home can be handled best if they are taken off "flat" rather than "cased," as is customary where raw skins are to be sold to fur buyers. To do this, opening cuts should be made where shown by the dotted lines in the diagram, figure 1, *a*. The tail should be split down the under side and the entire bone removed. The toes should be skinned out and the bones removed. Particular care should be exercised not to cut the skin when working around the eyes, ears, and nose. The ears should be skinned out so that they will turn completely wrong side out. All fat and flesh should then be cleaned off the skin and plenty of salt rubbed in all over the flesh side, especially into every corner and fold. It should then be rolled up with the fur side out and left overnight.

* The substance of this circular appeared as a copyrighted article in *Forest and Stream* for July, 1917.

The next morning it should be unrolled and examined for soft spots where the salt has not drawn out the moisture. If any such spots are found they should be rubbed well with salt and, in any case, the whole skin re-salted, and again rolled up. The following day the skin should be unrolled, the salt shaken off, and the skin stretched to its natural size and shape. It should then be dried, skin side out, in an airy, shady place.

When a dried skin is to be dressed it should first be placed in water until thoroughly softened. This process can be hastened by working and twisting the skin about from time to time. The soaking should not last more than twenty-four hours; and in warm weather skins left in water over twelve hours may "slip," so the quicker the skin is softened the safer it will be.

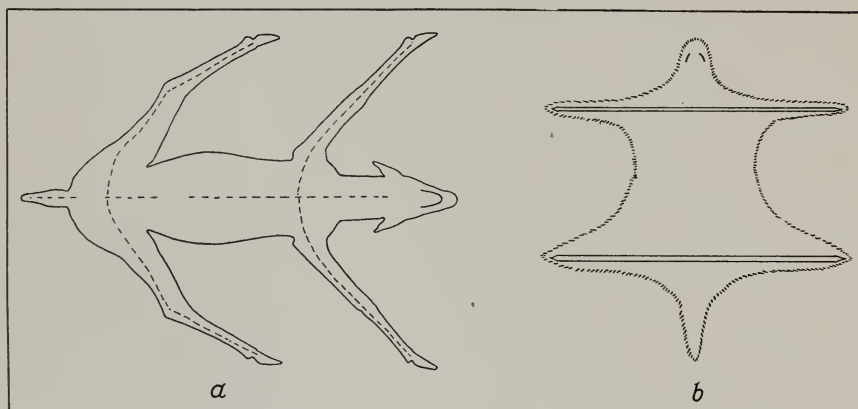


Fig. 1

When softened, the skin should be placed on a half-round beam (figure 2, *a*) and all skin-like tissue and grease on the flesh side removed with a square-edged steel fleshing tool. The back of a thin-bladed butcher-knife can be used for this work, after a piece of soft wood has been stuck on the point of the knife so as to make a second handle.

If the fur as well as the skin itself is very greasy the skin should be hung up to drain for twelve hours and then soaked in gasoline overnight to remove the grease. Be sure to keep the gasoline away from fire.

A tablespoonful of the washing powder known as "Pearline" should now be dissolved in two quarts of luke-warm (not hot) water, and the skin placed in it and worked until thoroughly limp, with no hard dry spots left. The pelt should then be hung up to drain for a few minutes (do not wring it out), after which the tan liquor should be painted on the flesh side with a clean paint brush.

To make the tan liquor, dissolve 2 ounces of salt and 2 ounces of powdered alum in a quart of boiling water. When this is cool add slowly, while stirring, 4 ounces commercial sulphuric acid and then 2 ounces washing soda (*not* "cooking" soda). The liquor is ready to use when cold and keeps well in bottles; but the bottles will burst if tightly corked at first.

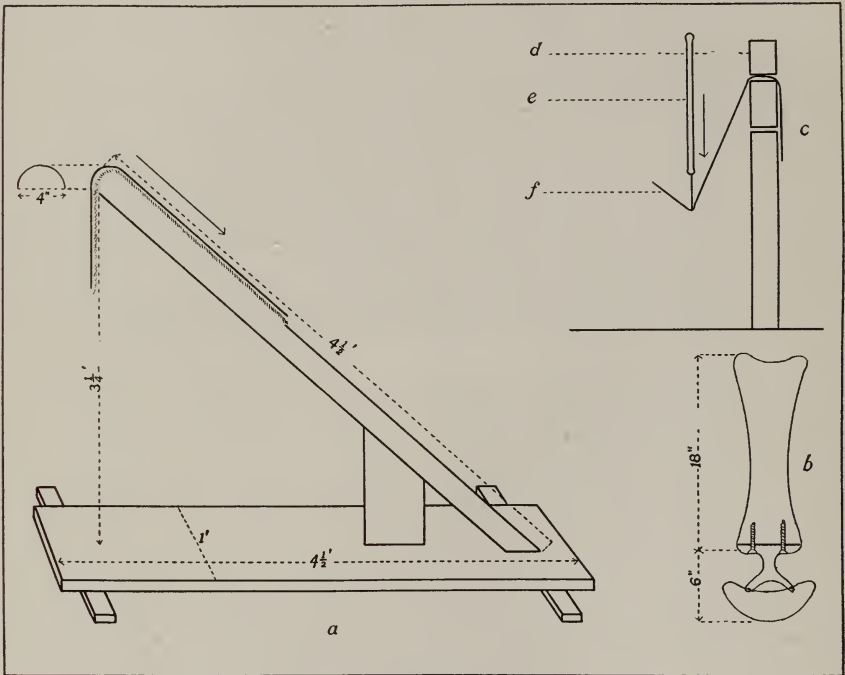


Fig. 2

In thin skins, two, and in thick skins three, coats of the tan liquor should be applied at six-hour intervals. After the last application of tan liquor the pelt should be hung up for ten hours. The entire skin should then be soaked for ten minutes in a neutralizing solution made by dissolving a handful of washing soda in half a gallon of cold water. This will neutralize any acid that may remain in the pores of the skin. The acid would in time weaken the skin if left unneutralized. The skin should then be thoroughly rinsed in clear cold water. A couple of light sticks, with the ends sharpened and placed in the pads of the feet (figure 1, *b*), will keep the legs extended and insure uniform drying.

When the skin is nearly dry and turns white on the flesh side, it is time to begin working and stretching it to insure a soft finish. The secret of a good soft finish lies in thoroughly working the skin. This may be done by pulling the skin back and forth over a large flat file which has been tightly clamped in a vise, or else through a large iron ring after the skin has been folded up with the fur side in. The pelt should be frequently re-rolled and turned about during this process.

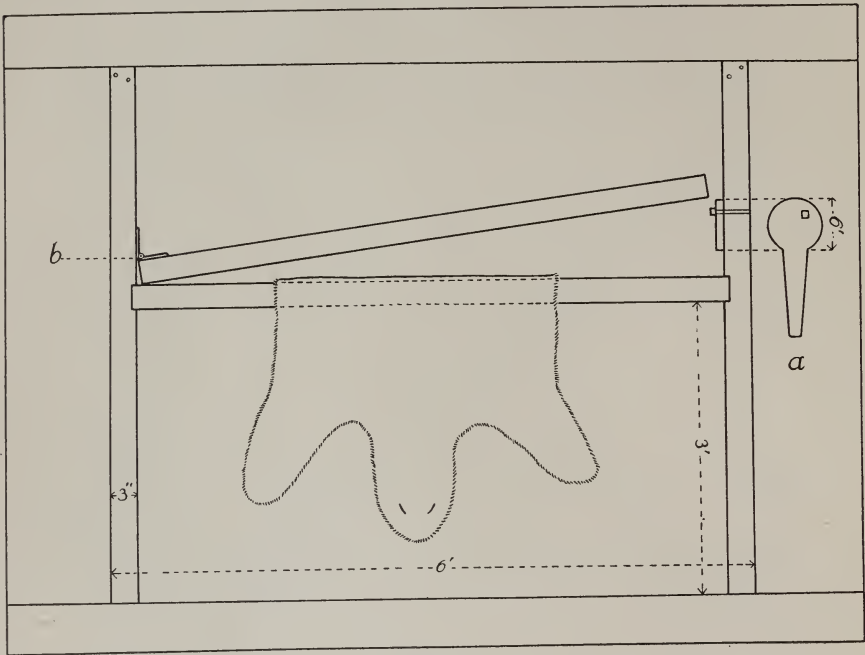


Fig. 3

If several skins are to be dressed, it would pay to take four two-by-three-inch scantlings, six feet long, and make a frame (figure 3) to hold the skins while they are being scraped with the special instrument called a "crutch knife" (figure 2, b). The crutch knife is made from a common single-blade cabbage chopper. The arm piece can be made from a piece of soft one-inch lumber, and should be just long enough so that when the upper end is placed under the armpit the fingers can readily grasp the handle of the chopper.

When the skin is nearly dry it should be placed in the frame flesh side up, the upper bar dropped on it, and the bar clamped tight by pushing down on the lock (figure 3, a). The skin should be held by the left hand while the blade of the crutch knife is pushed down over the taugth skin, with a scraping motion, by the right arm and hand.

A little whiting or chalk dusted on the skin will help the knife to take hold. Care should be taken that the knife is pushed straight down; if it slips sideways it will cut the skin (see figure 2, c). By turning the skin about in the frame, all the corners and edges can be reached. If the skin is held taut in the frame and whipped vigorously with an old buggy whip, this treatment will fluff out and clean the fur. A nice smooth finish can be secured by sandpapering any rough or thick spots on the flesh side.

Dressing Rabbit Skins.—The skins of our wild rabbits and hares are so thin that their pelts are difficult to dress. The large domesticated fur rabbits, on the other hand, such as the Black Flemish, Checkered Giant, and French Silver, have thick hides which may be readily tanned at home. Rabbit skins are usually taken off flat (figure 1, b). In fleshing any rabbit skin it is advisable to start at the tail and work toward the head. After the skin is fleshed it should be thoroughly salted and then put aside, rolled up, for a couple of days. It should then be hung up in a cool place and stretched loosely so that the skin will dry without any folds or large wrinkles.

When dry, the skins should be tanned by the method given in the present paper; or, if more convenient, after being thoroughly relaxed, they may be placed in a barrel or crock containing the following tanning solution: Water, 5 gallons; salt, 3 pounds; commercial sulphuric acid, 16 ounces. The skins should be stirred up frequently when first put into the tan liquor. Thin skins should remain in the tan liquor three weeks, thick skins four weeks. The skins should then be neutralized in a salsoda solution and finished as previously described.

It is best to dry rabbit skins slowly, working them each day until they are properly softened and thoroughly dry.

Transmitted March 7, 1921.

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